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| NEWS | 1 | | Web Page URLs for STN Seminar Schedule - N. America |
| NEWS | 2 | | "Ask CAS" for self-help around the clock |
| NEWS | 3 | FEB 28 | PATDPAFULL - New display fields provide for legal status data from INPADOC |
| NEWS | 4 | FEB 28 | BABS - Current-awareness alerts (SDIs) available |
| NEWS | 5 | MAR 02 | GBFULL: New full-text patent database on STN |
| NEWS | 6 | MAR 03 | REGISTRY/ZREGISTRY - Sequence annotations enhanced |
| NEWS | 7 | MAR 03 | MEDLINE file segment of TOXCENTER reloaded |
| NEWS | 8 | MAR 22 | KOREAPAT now updated monthly; patent information enhanced |
| NEWS | 9 | MAR 22 | Original IDE display format returns to REGISTRY/ZREGISTRY |
| NEWS | 10 | MAR 22 | PATDPASPC - New patent database available |
| NEWS | 11 | MAR 22 | REGISTRY/ZREGISTRY enhanced with experimental property tags |
| NEWS | 12 | APR 04 | EPFULL enhanced with additional patent information and new fields |
| NEWS | 13 | APR 04 | EMBASE - Database reloaded and enhanced |
| NEWS | 14 | APR 18 | New CAS Information Use Policies available online |
| NEWS | 15 | APR 25 | Patent searching, including current-awareness alerts (SDIs), based on application date in CA/CAPLUS and USPATFULL/USPAT2 may be affected by a change in filing date for U.S. applications. |
| NEWS | 16 | APR 28 | Improved searching of U.S. Patent Classifications for U.S. patent records in CA/CAPLUS |
| NEWS | 17 | MAY 23 | GBFULL enhanced with patent drawing images |
| NEWS | 18 | MAY 23 | REGISTRY has been enhanced with source information from CHEMCATS |
| NEWS | 19 | JUN 06 | The Analysis Edition of STN Express with Discover! (Version 8.0 for Windows) now available |
| NEWS | 20 | JUN 13 | RUSSIAPAT: New full-text patent database on STN |
| NEWS | 21 | JUN 13 | FRFULL enhanced with patent drawing images |
| NEWS | 22 | JUN 27 | MARPAT displays enhanced with expanded G-group definitions and text labels |
| NEWS | 23 | JUL 01 | MEDICONF removed from STN |
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| NEWS | 27 | AUG 11 | Derwent World Patents Index(R) web-based training during August |
| NEWS | 28 | AUG 11 | STN AnaVist workshops to be held in North America |
| NEWS EXPRESS | | | JUNE 13 CURRENT WINDOWS VERSION IS V8.0, CURRENT MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP), AND CURRENT DISCOVER FILE IS DATED 13 JUNE 2005 |
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NEWS WWW CAS World Wide Web Site (general information)

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* * * * * STN Columbus * * * * *

FILE 'HOME' ENTERED AT 11:27:53 ON 18 AUG 2005

| => file medline, uspatful, scisearch, biotechds, biosis, wpids, dgene | | |
|---|------------------|---------------|
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| FULL ESTIMATED COST | 0.21 | 0.21 |

FILE 'MEDLINE' ENTERED AT 11:28:26 ON 18 AUG 2005

FILE 'USPATFULL' ENTERED AT 11:28:26 ON 18 AUG 2005
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=> s "AESCP-2" or "aedes aegypti sterol carrier protein-2"
L1 18 "AESCP-2" OR "AEDES AEGYPTI STEROL CARRIER PROTEIN-2"

=> d l18 ti abs ibib tot
L18 NOT FOUND

The L-number entered has not been defined in this session, or it has been deleted. To see the L-numbers currently defined in this session, enter DISPLAY HISTORY at an arrow prompt (=>).

=> d l1 ti abs ibib tot

L1 ANSWER 1 OF 18 MEDLINE on STN
TI Functional analysis of **AeSCP-2** using gene expression knockdown in the yellow fever mosquito, *Aedes aegypti*.
AB The effect of gene expression knockdown was used to study the function of the sterol carrier protein-2 (**AeSCP-2**) in the yellow fever mosquito, *Aedes aegypti*. Injection of small double stranded **AeSCP-2** RNAs into mosquito larvae resulted in the knockdown of gene products. The lack of **AeSCP-2** in larvae coincided with a reduction in accumulated cholesterol in pupae, supporting the hypothesis that **AeSCP-2** may be involved in cholesterol uptake in mosquito larvae. Knockdown of **AeSCP-**

2 caused a high mortality rate in developing adult and reduced egg viability. Results from this study indicate that **AeSCP-2** is important for adult development and for the viability of the eggs.

ACCESSION NUMBER: 2005283088 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15926899
TITLE: Functional analysis of **AeSCP-2** using gene expression knockdown in the yellow fever mosquito, *Aedes aegypti*.
AUTHOR: Blitzer E J; Vyazunova I; Lan Q
CORPORATE SOURCE: Department of Entomology, University of Wisconsin-Madison, Madison, WI 53706, USA.
SOURCE: Insect molecular biology, (2005 Jun) 14 (3) 301-7.
Journal code: 9303579. ISSN: 0962-1075.
PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200507
ENTRY DATE: Entered STN: 20050602
Last Updated on STN: 20050709
Entered Medline: 20050708

L1 ANSWER 2 OF 18 MEDLINE on STN
TI Identification of mosquito sterol carrier protein-2 inhibitors.
AB A mosquito sterol carrier protein-2, **AeSCP-2**, has been shown to aid in the uptake of cholesterol in mosquito cells. The discovery of chemical inhibitors of **AeSCP-2** is reported here. **AeSCP-2** inhibitors (SCPIs) belong to several chemotypes of hydrophobic compounds. Those inhibitors competed with cholesterol for **AeSCP-2**, binding with relatively high binding affinities. In cultured insect cells, SCPIs reduced cholesterol uptake by as much as 30% at 1-5 microm concentrations. SCPIs were potent larvicides to the yellow fever mosquito, *Aedes aegypti*, and to the tobacco hornworm, *Manduca sexta*, with 50% lethal doses (LD50s) of 5-21 microm and 0.013-15 ng/mg diet, respectively. The results indicate that sterol carrier protein-2 has functional similarity in two different insect species.

bad date

ACCESSION NUMBER: 2005140282 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15627652
TITLE: Identification of mosquito sterol carrier protein-2 inhibitors.
AUTHOR: Kim Min-sik; Wessely Vilena; Lan Que
CORPORATE SOURCE: Department of Entomology, University of Wisconsin-Madison, Madison, Wisconsin, USA.
SOURCE: Journal of lipid research, (2005 Apr) 46 (4) 650-7.
Electronic Publication: 2005-01-01.
Journal code: 0376606. ISSN: 0022-2275.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200507
ENTRY DATE: Entered STN: 20050318
Last Updated on STN: 20050716
Entered Medline: 20050715

L1 ANSWER 3 OF 18 MEDLINE on STN
TI Subcellular localization of the mosquito sterol carrier protein-2 and sterol carrier protein-x.
AB Subcellular distribution of **Aedes aegypti** sterol carrier protein-2 (**AeSCP-2**) and **AeSCP-x** was studied using electron

microscopy. In both cultured *A. aegypti* cells and in the larval midgut, **AeSCP-2** was detected mostly in the cytosol, with some labeling mitochondria and nucleus, but not in membranous vesicles. The widespread distribution of **AeSCP-2** in the midgut epithelium is consistent with its potential lipid transfer function in all phases of cholesterol absorption. In contrast, **AeSCP-x** was found mostly in the peroxisome. Differences in the subcellular distribution of **AeSCP-2** and **AeSCP-x** suggest that these two members of the SCP-2 gene family are functionally distinct. Overexpression of **AeSCP-2** in *A. aegypti* cells showed increased localization of **AeSCP-2** to cytosol, mitochondria, and nucleus. This is the first report on the nuclear distribution of an SCP. Overexpression of **AeSCP-2** resulted in increased cholesterol incorporation in cells, suggesting that **AeSCP-2** enhances cholesterol uptake.

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ACCESSION NUMBER: 2004351261 MEDLINE
DOCUMENT NUMBER: PubMed ID: 15145982
TITLE: Subcellular localization of the mosquito sterol carrier protein-2 and sterol carrier protein-x.
AUTHOR: Lan Que; Massey Randall J
CORPORATE SOURCE: Department of Entomology, University of Wisconsin-Madison, Madison, WI 53706, USA.. qlan@entomology.wisc.edu
SOURCE: Journal of lipid research, (2004 Aug) 45 (8) 1468-74.
Electronic Publication: 2004-05-16.
Journal code: 0376606. ISSN: 0022-2275.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200502
ENTRY DATE: Entered STN: 20040716
Last Updated on STN: 20050209
Entered Medline: 20050208

L1 ANSWER 4 OF 18 MEDLINE on STN
TI Isolation and expression of a sterol carrier protein-2 gene from the yellow fever mosquito, *Aedes aegypti*.
AB Trafficking of cholesterol in insects is a very important process due to the fact that insects depend on dietary cholesterol to fulfil their physiological needs. We identified a putative mosquito sterol carrier protein-2 (SCP-2) cDNA from fourth instar subtracted cDNA library. The **AeSCP-2** protein has high degree homology in the sterol transfer domain to both rat and human SCP-2. Transcripts of **AeSCP-2** in fourth instars were detected strongly in the midgut, and weakly in the head and hindgut. In the early pupae, **AeSCP-2** transcription was observed in the thorax, head and body wall of abdomen, but not in the gut. The interaction of mosquito sterol carrier protein-2 (**AeSCP-2**) with cholesterol was examined. The Kd of purified recombinant **AeSCP-2** to cholesterol was $5.6 \pm 0.6 \times 10^{-9}$ M using radiolabelled cholesterol-binding assay. The results suggest that **AeSCP-2** has high affinity to cholesterol and may function as a carrier protein in mosquitoes.

ACCESSION NUMBER: 2003036500 MEDLINE
DOCUMENT NUMBER: PubMed ID: 12542635
TITLE: Isolation and expression of a sterol carrier protein-2 gene from the yellow fever mosquito, *Aedes aegypti*.
AUTHOR: Krebs K C; Lan Q
CORPORATE SOURCE: Department of Entomology, University of Wisconsin-Madison, Madison, WI 53706, USA.
SOURCE: Insect molecular biology, (2003 Feb) 12 (1) 51-60.
Journal code: 9303579. ISSN: 0962-1075.

PUB. COUNTRY: England: United Kingdom
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200304
ENTRY DATE: Entered STN: 20030125
Last Updated on STN: 20030404
Entered Medline: 20030403

L1 ANSWER 5 OF 18 USPATFULL on STN
TI Sterol carrier protein-2 from the mosquito, *Aedes aegypti*
AB The invention provides **AeSCP-2** polypeptides, polynucleotides encoding **AeSCP-2** polypeptides, and methods for producing such materials by recombinant techniques. Also provided are methods for utilizing **AeSCP-2** polypeptides to screen for compounds exhibiting antagonist or agonist activity toward **AeSCP-2** biological activity, in particular, cholesterol transport.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:271391 USPATFULL
TITLE: Sterol carrier protein-2 from the mosquito, *Aedes aegypti*
INVENTOR(S): Lan, Que, Madison, WI, UNITED STATES
Krebs, Kendall C., Waterloo, WI, UNITED STATES
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation (U.S. corporation)

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2004211865 | A1 | 20041028 |
| APPLICATION INFO.: | US 2004-823203 | A1 | 20040413 (10) |

| | NUMBER | DATE |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2003-465648P | 20030425 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | GODFREY & KAHN, S.C., 780 N. WATER STREET, MILWAUKEE, WI, 53202 | |
| NUMBER OF CLAIMS: | 11 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 6 Drawing Page(s) | |
| LINE COUNT: | 1594 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L1 ANSWER 6 OF 18 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN
TI Functional analysis of **AeSCP-2** using gene expression knockdown in the yellow fever mosquito, *Aedes aegypti*
AB The effect of gene expression knockdown was used to study the function of the sterol carrier protein-2 (**AeSCP-2**) in the yellow fever mosquito, *Aedes aegypti*. Injection of small double stranded **AeSCP-2** RNAs into mosquito larvae resulted in the knockdown of gene products. The lack of **AeSCP-2** in larvae coincided with a reduction in accumulated cholesterol in pupae, supporting the hypothesis that **AeSCP-2** may be involved in cholesterol uptake in mosquito larvae. Knockdown of **AeSCP-2** caused a high mortality rate in developing adult and reduced egg viability. Results from this study indicate that **AeSCP-2** is important for adult development and for the viability of the eggs.

ACCESSION NUMBER: 2005:566916 SCISEARCH
THE GENUINE ARTICLE: 929TN

TITLE: Functional analysis of **AeSCP-2** using
 gene expression knockdown in the yellow fever mosquito,
Aedes aegypti
 AUTHOR: Blitzer E J; Vyazunova I; Lan Q (Reprint)
 CORPORATE SOURCE: Univ Wisconsin, Dept Entomol, Madison, WI 53706 USA
 (Reprint)
 qlan@entomology.wisc.edu
 COUNTRY OF AUTHOR: USA
 SOURCE: INSECT MOLECULAR BIOLOGY, (JUN 2005) Vol. 14, No. 3, pp.
 301-307.
 ISSN: 0962-1075.
 PUBLISHER: BLACKWELL PUBLISHING, 9600 GARSINGTON RD, OXFORD OX4 2DG,
 OXON, ENGLAND.
 DOCUMENT TYPE: Article; Journal
 LANGUAGE: English
 REFERENCE COUNT: 34
 ENTRY DATE: Entered STN: 9 Jun 2005
 Last Updated on STN: 9 Jun 2005
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L1 ANSWER 7 OF 18 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
 STN
 TI Identification of mosquito sterol carrier protein-2 inhibitors
 AB A mosquito sterol carrier protein-2, **AeSCP-2**, has
 been shown to aid in the uptake of cholesterol in mosquito cells. The
 discovery of chemical inhibitors of **AeSCP-2** is
 reported here. **AeSCP-2** inhibitors (SCPIs) belong to
 several chemotypes of hydrophobic compounds. Those inhibitors competed
 with cholesterol for **AeSCP-2**, binding with relatively
 high binding affinities. In cultured insect cells, SCPIs reduced
 cholesterol uptake by as much as 30% at 1-5 μ M concentrations. SCPIs
 were potent larvicides to the yellow fever mosquito, *Aedes aegypti*, and to
 the tobacco hornworm, *Manduca sexta*, with 50% lethal doses (LD(50)s) of
 5-21 μ M and 0.013-15 ng/mg diet, respectively. The results indicate
 that sterol carrier protein-2 has functional similarity in two different
 insect species.

ACCESSION NUMBER: 2005:400661 SCISEARCH
 THE GENUINE ARTICLE: 913BS
 TITLE: Identification of mosquito sterol carrier protein-2
 inhibitors
 AUTHOR: Kim M S; Wessely V; Lan Q (Reprint)
 CORPORATE SOURCE: Univ Wisconsin, Dept Entomol, Madison, WI 53706 USA
 (Reprint)
 qlan@entomology.wisc.edu
 COUNTRY OF AUTHOR: USA
 SOURCE: JOURNAL OF LIPID RESEARCH, (APR 2005) Vol. 46, No. 4, pp.
 650-657.
 ISSN: 0022-2275.
 PUBLISHER: AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650
 ROCKVILLE PIKE, BETHESDA, MD 20814-3996 USA.
 DOCUMENT TYPE: Article; Journal
 LANGUAGE: English
 REFERENCE COUNT: 27
 ENTRY DATE: Entered STN: 21 Apr 2005
 Last Updated on STN: 15 Jul 2005
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L1 ANSWER 8 OF 18 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on
 STN
 TI Subcellular localization of the mosquito sterol carrier protein-2 and
 sterol carrier protein-x
 AB Subcellular distribution of *Aedes aegypti*
 sterol carrier protein-2 (

AeSCP-2) and **AeSCP-x** was studied using electron microscopy. In both cultured *A. aegypti* cells and in the larval midgut, **AeSCP-2** was detected mostly in the cytosol, with some labeling mitochondria and nucleus, but not in membranous vesicles. The widespread distribution of **AeSCP-2** in the midgut epithelium is consistent with its potential lipid transfer function in all phases of cholesterol absorption. In contrast, **AeSCP-x** was found mostly in the peroxisome. Differences in the subcellular distribution of **AeSCP-2** and **AeSCP-x** suggest that these two members of the SCP-2 gene family are functionally distinct. Overexpression of **AeSCP-2** in *A. aegypti* cells showed increased localization of **AeSCP-2** to cytosol, mitochondria, and nucleus. This is the first report on the nuclear distribution of an SCP. Overexpression of **AeSCP-2** resulted in increased cholesterol incorporation in cells, suggesting that **AeSCP-2** enhances cholesterol uptake. -Lan, Q., and R. J. Massey. Subcellular localization of the mosquito sterol carrier protein-2 and sterol carrier protein-x.

ACCESSION NUMBER: 2004:720557 SCISEARCH
 THE GENUINE ARTICLE: 843NN
 TITLE: Subcellular localization of the mosquito sterol carrier protein-2 and sterol carrier protein-x
 AUTHOR: Lan Q (Reprint); Massey R J
 CORPORATE SOURCE: Univ Wisconsin, Dept Entomol, Madison, WI 53706 USA
 (Reprint); Univ Wisconsin, Dept Electron Microscope Facil, Madison, WI 53706 USA
 qlan@entomology.wisc.edu
 COUNTRY OF AUTHOR: USA
 SOURCE: JOURNAL OF LIPID RESEARCH, (AUG 2004) Vol. 45, No. 8, pp. 1468-1474.
 ISSN: 0022-2275.
 PUBLISHER: AMER SOC BIOCHEMISTRY MOLECULAR BIOLOGY INC, 9650 ROCKVILLE PIKE, BETHESDA, MD 20814-3996 USA.
 DOCUMENT TYPE: Article; Journal
 LANGUAGE: English
 REFERENCE COUNT: 26
 ENTRY DATE: Entered STN: 3 Sep 2004
 Last Updated on STN: 3 Sep 2004
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L1 ANSWER 9 OF 18 SCISEARCH COPYRIGHT (c) 2005 The Thomson Corporation on STN
 TI Isolation and expression of a sterol carrier protein-2 gene from the yellow fever mosquito, *Aedes aegypti*
 AB Trafficking of cholesterol in insects is a very important process due to the fact that insects depend on dietary cholesterol to fulfil their physiological needs. We identified a putative mosquito sterol carrier protein-2 (SCP-2) cDNA from fourth instar subtracted cDNA library. The **AeSCP-2** protein has high degree homology in the sterol transfer domain to both rat and human SCP-2. Transcripts of **AeSCP-2** in fourth instars were detected strongly in the midgut, and weakly in the head and hindgut. In the early pupae, **AeSCP-2** transcription was observed in the thorax, head and body wall of abdomen, but not in the gut.
 The interaction of mosquito sterol carrier protein-2 (**AeSCP-2**) with cholesterol was examined. The K-d of purified recombinant **AeSCP-2** to cholesterol was 5.6 +/- 0.6 x 10⁽⁻⁹⁾ m using radiolabelled cholesterol-binding assay. The results suggest that **AeSCP-2** has high affinity to cholesterol and may function as a carrier protein in mosquitoes.

ACCESSION NUMBER: 2003:117881 SCISEARCH
 THE GENUINE ARTICLE: 638LH
 TITLE: Isolation and expression of a sterol carrier protein-2

AUTHOR: gene from the yellow fever mosquito, *Aedes aegypti*
 Krebs K C; Lan Q (Reprint)
 CORPORATE SOURCE: Univ Wisconsin, Dept Entomol, Madison, WI 53706 USA
 (Reprint)
 COUNTRY OF AUTHOR: USA
 SOURCE: INSECT MOLECULAR BIOLOGY, (FEB 2003) Vol. 12, No. 1, pp.
 51-60.
 ISSN: 0962-1075.
 PUBLISHER: BLACKWELL PUBLISHING LTD, 9600 GARSINGTON RD, OXFORD OX4
 2DG, OXON, ENGLAND.
 DOCUMENT TYPE: Article; Journal
 LANGUAGE: English
 REFERENCE COUNT: 63
 ENTRY DATE: Entered STN: 14 Feb 2003
 Last Updated on STN: 14 Feb 2003
 ABSTRACT IS AVAILABLE IN THE ALL AND IALL FORMATS

L1 ANSWER 10 OF 18 BIOTECHDS COPYRIGHT 2005 THE THOMSON CORP. on STN
 TI Novel isolated and purified *Aedes aegypti*
sterol carrier protein-2
 polypeptide or its fragment capable of intracellular cholesterol
 transport, useful for identifying agonist or antagonist of biological
 activity of polypeptide;
 recombinant protein production via plasmid expression in host cell for
 use in drug screenin
 AN 2004-26494 BIOTECHDS
 AB DERWENT ABSTRACT:
 NOVELTY - An isolated and purified *Aedes aegypti*
sterol carrier protein-2 (
AeSCP-2) polypeptide (I) comprising an amino acid
 sequence at least 85% identical to a fully defined sequence of 110 amino
 acids (S1) as given in the specification, or its biologically-active
 fragment capable of intracellular cholesterol transport, is new.
 DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for: (1)
 an isolated and purified nucleic acid (II) specifically hybridizing under
 stringent conditions to either strand of a denatured, double-stranded
 nucleic acid encoding (S1); (2) an expression vector (III) comprising
 (II); (3) a transformed host cell or organism (IV) comprising (II); and
 (4) preparing (I).
 BIOTECHNOLOGY - Preparation: (I) is produced by culturing (IV) under
 conditions conducive to expression of (I), and recovering the expressed
 polypeptide from (IV) in isolated and purified form (claimed). Preferred
 Polypeptide: In (I), the amino acid sequence is (S1). Preferred Nucleic
 Acid: In (II), the denatured, double-stranded nucleic acid encoding (S1),
 is the nucleotide sequence comprising a fully defined sequence of 333
 base pairs as given in the specification.
 USE - (I) is useful for identifying whether a compound is an agonist
 or antagonist of **AeSCP-2** biological activity, which
 involves incubating (I) comprising (S1) or its biologically-active
 fragment with a biological target in the presence of a compound, and
 measuring the ability of the compound to enhance or block the interaction
 between (I) or its fragment and the biological target, thus identifying
 an agonist or antagonist effective in altering **AeSCP-2**
 biological activity, where the biological target is cholesterol and the
AeSCP-2 biological activity is cholesterol transport.
 (I) is useful for identifying compounds which bind to or interact with
 (I) or its fragments, which involves contacting (I) or its fragment with
 a compound to be screened under conditions to permit binding to or
 interaction between the compound and (I) or its fragment to assess the
 binding to or interaction with the compound, where the binding or
 interaction is associated with a detectable signal in response to the
 binding or interaction of (I) or its fragment with the compound, and
 determining whether the compound binds to or interacts with (I) or its

fragment by detecting the presence or absence of the signal generated from the binding or interaction of the compound with (I) or its fragment (claimed).

ADVANTAGE - (I) is capable of intracellular cholesterol transport in mosquitoes.

EXAMPLE - Preparation of recombinant *Aedes aegypti*

sterol carrier protein-2 (rAeSCP-2)

polypeptide was carried out as follows. To produce rAeSCP-2 the entire coding region of the **AeSCP-2** gene was cloned into the pGEX-4T glutathione-S-transferase (GST) tag vector. Sequence analysis was performed to confirm that the fusion protein was in frame with GST. The GST/**AeSCP-2** fusion protein was purified on a GST affinity column and the GST tag was removed by digesting with thrombin. The vector was introduced into bacterial cells. The bacterial culture was incubated overnight at 18degreesC after addition of isopropyl-beta-D-thiogalactopyranoside (IPTG) (0.2 mM). The predicted molecular weight of **AeSCP-2** was 12.3 kDa and the purified rAeSCP-2 was 13 kDa estimated on the sodium dodecyl sulfate- polyacrylamide gel electrophoresis (SDS-PAGE). Thrombin was removed from eluted rAeSCP-2 by passing through a benzamidine column. The fusion protein (100 mg) from cultures (2.5 l) was obtained. Purified **AeSCP-2** was concentrated to 8.1 mg/ml in phosphate buffered saline (PBS), pH 7.4, and stored in PBS at -80degreesC. (23 pages)

ACCESSION NUMBER: 2004-26494 BIOTECHDS

TITLE: Novel isolated and purified *Aedes aegypti*
sterol carrier protein-2
polypeptide or its fragment capable of intracellular
cholesterol transport, useful for identifying agonist or
antagonist of biological activity of polypeptide;
recombinant protein production via plasmid expression in
host cell for use in drug screenin

AUTHOR: LAN Q; KREBS K C

PATENT ASSIGNEE: WISCONSIN ALUMNI RES FOUND

PATENT INFO: US 2004211865 28 Oct 2004

APPLICATION INFO: US 2004-823203 13 Apr 2004

PRIORITY INFO: US 2004-823203 13 Apr 2004; US 2003-465648 25 Apr 2003

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: WPI: 2004-765537 [75]

L1 ANSWER 11 OF 18 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on
STN

TI Subcellular localization of the mosquito sterol carrier protein-2 and
sterol carrier protein-x.

AB Subcellular distribution of *Aedes aegypti*

sterol carrier protein-2 (
AeSCP-2) and **AeSCP-x** was studied using electron
microscopy. In both cultured *A. aegypti* cells and in the larval midgut,
AeSCP-2 was detected mostly in the cytosol, with some
labeling mitochondria and nucleus, but not in membranous vesicles. The
widespread distribution of **AeSCP-2** in the midgut
epithelium is consistent with its potential lipid transfer function in all
phases of cholesterol absorption. In contrast, **AeSCP-x** was found mostly
in the peroxisome. Differences in the subcellular distribution of
AeSCP-2 and **AeSCP-x** suggest that these two members of
the SCP-2 gene family are functionally distinct. Overexpression of
AeSCP-2 in *A. aegypti* cells showed increased
localization of **AeSCP-2** to cytosol, mitochondria, and
nucleus. This is the first report on the nuclear distribution of an SCP.
Overexpression of **AeSCP-2** resulted in increased
cholesterol incorporation in cells, suggesting that **AeSCP-2**
enhances cholesterol uptake.-Lan, Q., and R. J. Massey.
Subcellular localization of the mosquito sterol carrier protein-2 and

sterol carrier protein-x.

ACCESSION NUMBER: 2004:404206 BIOSIS
DOCUMENT NUMBER: PREV200400408392
TITLE: Subcellular localization of the mosquito sterol carrier protein-2 and sterol carrier protein-x.
AUTHOR(S): Lan, Que [Reprint Author]; Massey, Randall J.
CORPORATE SOURCE: Dept Entomol, Univ Wisconsin, Madison, WI, 53706, USA
qlan@entomology.wisc.edu
SOURCE: Journal of Lipid Research, (August 2004) Vol. 45, No. 8,
pp. 1468-1474. print.
CODEN: JLPRAW. ISSN: 0022-2275.
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 20 Oct 2004
Last Updated on STN: 20 Oct 2004

L1 ANSWER 12 OF 18 BIOSIS COPYRIGHT (c) 2005 The Thomson Corporation on STN

TI Isolation and expression of a sterol carrier protein-2 gene from the yellow fever mosquito, *Aedes aegypti*.

AB Trafficking of cholesterol in insects is a very important process due to the fact that insects depend on dietary cholesterol to fulfil their physiological needs. We identified a putative mosquito sterol carrier protein-2 (SCP-2) cDNA from fourth instar subtracted cDNA library. The **AeSCP-2** protein has high degree homology in the sterol transfer domain to both rat and human SCP-2. Transcripts of **AeSCP-2** in fourth instars were detected strongly in the midgut, and weakly in the head and hindgut. In the early pupae, **AeSCP-2** transcription was observed in the thorax, head and body wall of abdomen, but not in the gut. The interaction of mosquito sterol carrier protein-2 (**AeSCP-2**) with cholesterol was examined. The Kd of purified recombinant **AeSCP-2** to cholesterol was $5.6 \pm 0.6 \times 10^{-9}$ M using radiolabelled cholesterol-binding assay. The results suggest that **AeSCP-2** has high affinity to cholesterol and may function as a carrier protein in mosquitoes.

ACCESSION NUMBER: 2003:119677 BIOSIS
DOCUMENT NUMBER: PREV200300119677
TITLE: Isolation and expression of a sterol carrier protein-2 gene from the yellow fever mosquito, *Aedes aegypti*.
AUTHOR(S): Krebs, K. C.; Lan, Q. [Reprint Author]
CORPORATE SOURCE: Department of Entomology, University of Wisconsin-Madison, Madison, WI, 53706, USA
qlan@entomology.wisc.edu
SOURCE: Insect Molecular Biology, (February 2003) Vol. 12, No. 1, pp. 51-60. print.
ISSN: 0962-1075 (ISSN print).
DOCUMENT TYPE: Article
LANGUAGE: English
ENTRY DATE: Entered STN: 5 Mar 2003
Last Updated on STN: 5 Mar 2003

L1 ANSWER 13 OF 18 WPIDS COPYRIGHT 2005 THE THOMSON CORP on STN

TI Novel isolated and purified **Aedes aegypti** sterol carrier protein-2 polypeptide

or its fragment capable of intracellular cholesterol transport, useful for identifying agonist or antagonist of biological activity of polypeptide.

AN 2004-765537 [75] WPIDS

AB US2004211865 A UPAB: 20041122

NOVELTY - An isolated and purified **Aedes aegypti** sterol carrier protein-2 (

AeSCP-2) polypeptide (I) comprising an amino acid sequence at least 85% identical to a fully defined sequence of 110 amino acids (S1) as given in the specification, or its biologically-active

fragment capable of intracellular cholesterol transport, is new.

DETAILED DESCRIPTION - INDEPENDENT CLAIMS are also included for:

(1) an isolated and purified nucleic acid (II) specifically hybridizing under stringent conditions to either strand of a denatured, double-stranded nucleic acid encoding (S1);

(2) an expression vector (III) comprising (II);

(3) a transformed host cell or organism (IV) comprising (II); and

(4) preparing (I).

USE - (I) is useful for identifying whether a compound is an agonist or antagonist of **AeSCP-2** biological activity, which involves incubating (I) comprising (S1) or its biologically-active fragment with a biological target in the presence of a compound, and measuring the ability of the compound to enhance or block the interaction between (I) or its fragment and the biological target, thus identifying an agonist or antagonist effective in altering **AeSCP-2** biological activity, where the biological target is cholesterol and the **AeSCP-2** biological activity is cholesterol transport.

(I) is useful for identifying compounds which bind to or interact with (I) or its fragments, which involves contacting (I) or its fragment with a compound to be screened under conditions to permit binding to or interaction between the compound and (I) or its fragment to assess the binding to or interaction with the compound, where the binding or interaction is associated with a detectable signal in response to the binding or interaction of (I) or its fragment with the compound, and determining whether the compound binds to or interacts with (I) or its fragment by detecting the presence or absence of the signal generated from the binding or interaction of the compound with (I) or its fragment (claimed).

ADVANTAGE - (I) is capable of intracellular cholesterol transport in mosquitoes.

Dwg. 0/7

ACCESSION NUMBER: 2004-765537 [75] WPIDS
DOC. NO. NON-CPI: N2004-603943
DOC. NO. CPI: C2004-268343
TITLE: Novel isolated and purified **Aedes aegypti sterol carrier protein-2** polypeptide or its fragment capable of intracellular cholesterol transport, useful for identifying agonist or antagonist of biological activity of polypeptide.
DERWENT CLASS: B04 D16 S03
INVENTOR(S): KREBS, K C; LAN, Q
PATENT ASSIGNEE(S): (WISC) WISCONSIN ALUMNI RES FOUND
COUNTRY COUNT: 1
PATENT INFORMATION:

| PATENT NO | KIND | DATE | WEEK | LA | PG |
|---------------|------|----------|-----------|----|----|
| US 2004211865 | A1 | 20041028 | (200475)* | | 23 |

APPLICATION DETAILS:

| PATENT NO | KIND | APPLICATION | DATE |
|---------------|----------------|-----------------|----------|
| US 2004211865 | A1 Provisional | US 2003-465648P | 20030425 |
| | | US 2004-823203 | 20040413 |

PRIORITY APPLN. INFO: US 2003-465648P 20030425; US
2004-823203 20040413

L1 ANSWER 14 OF 18 DGENE COPYRIGHT 2005 The Thomson Corp on STN
TI Novel isolated and purified **Aedes aegypti**

sterol carrier protein-2

polypeptide or its fragment capable of intracellular cholesterol transport, useful for identifying agonist or antagonist of biological activity of polypeptide.

AN ADT61142 protein DGENE

AB The invention relates to an isolated and purified **Aedes**

aegypti sterol carrier protein-

2 (AeSCP-2) polypeptide. The polypeptide

useful for identifying whether a compound is an agonist or antagonist of **AeSCP-2** biological activity. The polypeptide is useful for identifying compounds which bind to or interact with the polypeptide or its fragments. The polypeptide is capable of intracellular cholesterol transport in mosquitoes. The present sequence represents the amino acid sequence of the yellow fever mosquito sterol carrier protein-2 (**AeSCP-2**).

ACCESSION NUMBER: ADT61142 protein DGENE

TITLE: Novel isolated and purified **Aedes aegypti**
sterol carrier protein-2

polypeptide or its fragment capable of intracellular cholesterol transport, useful for identifying agonist or antagonist of biological activity of polypeptide.

INVENTOR: Lan Q; Krebs K C

PATENT ASSIGNEE: (WISC)WISCONSIN ALUMNI RES FOUND.

PATENT INFO: US 2004211865 A1 20041028 23

APPLICATION INFO: US 2004-823203 20040413

PRIORITY INFO: US 2003-465648P 20030425

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 2004-765537 [75]

CROSS REFERENCES: N-PSDB: ADT61140; ADT61141

DESCRIPTION: Yellow fever mosquito sterol carrier protein-2 (**AeSCP-2**).

L1 ANSWER 15 OF 18 DGENE COPYRIGHT 2005 The Thomson Corp on STN

TI Novel isolated and purified **Aedes aegypti**

sterol carrier protein-2

polypeptide or its fragment capable of intracellular cholesterol transport, useful for identifying agonist or antagonist of biological activity of polypeptide.

AN ADT61144 DNA DGENE

AB The invention relates to an isolated and purified **Aedes**

aegypti sterol carrier protein-

2 (AeSCP-2) polypeptide. The polypeptide

useful for identifying whether a compound is an agonist or antagonist of **AeSCP-2** biological activity. The polypeptide is useful for identifying compounds which bind to or interact with the polypeptide or its fragments. The polypeptide is capable of intracellular cholesterol transport in mosquitoes. The present sequence represents a yellow fever mosquito sterol carrier protein-2 (**AeSCP-2**) 5' rapid amplification of cDNA end (RACE) primer.

ACCESSION NUMBER: ADT61144 DNA DGENE

TITLE: Novel isolated and purified **Aedes aegypti**
sterol carrier protein-2

polypeptide or its fragment capable of intracellular cholesterol transport, useful for identifying agonist or antagonist of biological activity of polypeptide.

INVENTOR: Lan Q; Krebs K C

PATENT ASSIGNEE: (WISC)WISCONSIN ALUMNI RES FOUND.

PATENT INFO: US 2004211865 A1 20041028 23

APPLICATION INFO: US 2004-823203 20040413

PRIORITY INFO: US 2003-465648P 20030425

DOCUMENT TYPE: Patent

LANGUAGE: English

OTHER SOURCE: 2004-765537 [75]
DESCRIPTION: Yellow fever mosquito sterol carrier protein-2 5' RACE
primer-2.

L1 ANSWER 16 OF 18 DGENE COPYRIGHT 2005 The Thomson Corp on STN
TI Novel isolated and purified **Aedes aegypti**
sterol carrier protein-2
polypeptide or its fragment capable of intracellular cholesterol
transport, useful for identifying agonist or antagonist of biological
activity of polypeptide.
AN ADT61141 cDNA DGENE
AB The invention relates to an isolated and purified **Aedes**
aegypti sterol carrier protein-
2 (AeSCP-2) polypeptide. The polypeptide
useful for identifying whether a compound is an agonist or antagonist of
AeSCP-2 biological activity. The polypeptide is useful
for identifying compounds which bind to or interact with the polypeptide
or its fragments. The polypeptide is capable of intracellular
cholesterol transport in mosquitoes. The present sequence represents the
yellow fever mosquito sterol carrier protein-2 (**AeSCP-**
2) cDNA.

ACCESSION NUMBER: ADT61141 cDNA DGENE
TITLE: Novel isolated and purified **Aedes aegypti**
sterol carrier protein-2
polypeptide or its fragment capable of intracellular
cholesterol transport, useful for identifying agonist or
antagonist of biological activity of polypeptide.
INVENTOR: Lan Q; Krebs K C
PATENT ASSIGNEE: (WISC)WISCONSIN ALUMNI RES FOUND.
PATENT INFO: US 2004211865 A1 20041028 23
APPLICATION INFO: US 2004-823203 20040413
PRIORITY INFO: US 2003-465648P 20030425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2004-765537 [75]
CROSS REFERENCES: P-PSDB: ADT61142
DESCRIPTION: Yellow fever mosquito sterol carrier protein-2 (**AeSCP**
-2) cDNA.

L1 ANSWER 17 OF 18 DGENE COPYRIGHT 2005 The Thomson Corp on STN
TI Novel isolated and purified **Aedes aegypti**
sterol carrier protein-2
polypeptide or its fragment capable of intracellular cholesterol
transport, useful for identifying agonist or antagonist of biological
activity of polypeptide.
AN ADT61143 DNA DGENE
AB The invention relates to an isolated and purified **Aedes**
aegypti sterol carrier protein-
2 (AeSCP-2) polypeptide. The polypeptide
useful for identifying whether a compound is an agonist or antagonist of
AeSCP-2 biological activity. The polypeptide is useful
for identifying compounds which bind to or interact with the polypeptide
or its fragments. The polypeptide is capable of intracellular
cholesterol transport in mosquitoes. The present sequence represents a
yellow fever mosquito sterol carrier protein-2 (**AeSCP-**
2) 5' rapid amplification of cDNA end (RACE) primer.

ACCESSION NUMBER: ADT61143 DNA DGENE
TITLE: Novel isolated and purified **Aedes aegypti**
sterol carrier protein-2
polypeptide or its fragment capable of intracellular
cholesterol transport, useful for identifying agonist or
antagonist of biological activity of polypeptide.
INVENTOR: Lan Q; Krebs K C

PATENT ASSIGNEE: (WISC)WISCONSIN ALUMNI RES FOUND.
PATENT INFO: US 2004211865 A1 20041028 23
APPLICATION INFO: US 2004-823203 20040413
PRIORITY INFO: US 2003-465648P 20030425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2004-765537 [75]
DESCRIPTION: Yellow fever mosquito sterol carrier protein-2 5' RACE
primer-1.

L1 ANSWER 18 OF 18 DGENE COPYRIGHT 2005 The Thomson Corp on STN
TI Novel isolated and purified **Aedes aegypti**
sterol carrier protein-2
polypeptide or its fragment capable of intracellular cholesterol
transport, useful for identifying agonist or antagonist of biological
activity of polypeptide.
AN ADT61140 cDNA DGENE
AB The invention relates to an isolated and purified **Aedes**
aegypti sterol carrier protein-
2 (AeSCP-2) polypeptide. The polypeptide
useful for identifying whether a compound is an agonist or antagonist of
AeSCP-2 biological activity. The polypeptide is useful
for identifying compounds which bind to or interact with the polypeptide
or its fragments. The polypeptide is capable of intracellular
cholesterol transport in mosquitoes. The present sequence represents the
yellow fever mosquito sterol carrier protein-2 (**AeSCP-**
2) coding region.

ACCESSION NUMBER: ADT61140 cDNA DGENE
TITLE: Novel isolated and purified **Aedes aegypti**
sterol carrier protein-2
polypeptide or its fragment capable of intracellular
cholesterol transport, useful for identifying agonist or
antagonist of biological activity of polypeptide.
INVENTOR: Lan Q; Krebs K C
PATENT ASSIGNEE: (WISC)WISCONSIN ALUMNI RES FOUND.
PATENT INFO: US 2004211865 A1 20041028 23
APPLICATION INFO: US 2004-823203 20040413
PRIORITY INFO: US 2003-465648P 20030425
DOCUMENT TYPE: Patent
LANGUAGE: English
OTHER SOURCE: 2004-765537 [75]
CROSS REFERENCES: P-PSDB: ADT61142
DESCRIPTION: Yellow fever mosquito sterol carrier protein-2 (**AeSCP**
-2) coding region.

=> s SCPI

L2 111 SCPI

=> s 12 and 11

L3 0 L2 AND L1

=> s 12 and (inhibition)

L4 7 L2 AND (INHIBITION)

=> d 14 ti abs ibib tot

L4 ANSWER 1 OF 7 USPATFULL on STN
TI Methods and materials relating to gene expression
AB An expression cassette for expressing a nucleic acid of interest derived
from the regulatory region of the methylenomycin gene cluster of the
SCPI plasmid of *Streptomyces coelicolor* A3(2), and related materials and
methods.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2004:114123 USPATFULL
TITLE: Methods and materials relating to gene expression
INVENTOR(S): Chater, Keith Frederick, Norwich, UNITED KINGDOM
Bruton, Celia Joyce, Norwich, UNITED KINGDOM
O'Rourke, Sean Joseph, Cork, IRELAND

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2004086962 | A1 | 20040506 |
| APPLICATION INFO.: | US 2002-168663 | A1 | 20021025 (10) |
| | WO 2000-GB4972 | | 20001220 |

| | NUMBER | DATE |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | GB 1999-30477 | 19991223 |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | DANN, DORFMAN, HERRELL & SKILLMAN, 1601 MARKET STREET, SUITE 2400, PHILADELPHIA, PA, 19103-2307 | |
| NUMBER OF CLAIMS: | 63 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 29 Drawing Page(s) | |
| LINE COUNT: | 3825 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 2 OF 7 USPATFULL on STN

TI Bone graft

AB An improved demineralized bone matrix (DBM) or other matrix composition is provided that has been mixed with a stabilizing agent that acts as (1) a diffusion barrier, (2) a enzyme inhibitor, (3) a competitive substrate, or (4) a masking moiety. A diffusion barrier acts as a barrier so as to protect the osteoinductive factors found in DBM from being degraded by proteolytic and glycolytic enzymes at the implantation site. Stabilizing agents may be any biodegradable material such as starches, modified starches, cellulose, dextran, polymers, proteins, and collagen. As the stabilizing agents degrades or dissolves in vivo, the osteoinductive factors such as TGF- β , BMP, and IGF are activated or exposed, and the activated factors work to recruit cells from the preivascular space to the site of injury and to cause differentiation into bone-forming cells. The invention also provides methods of preparing, testing, and using the inventive improved osteodinductive matrix compositions.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2003:206901 USPATFULL
TITLE: Bone graft
INVENTOR(S): Knaack, David, Holmdel, NJ, UNITED STATES
Traianedes, Kathy, North Brunswick, NJ, UNITED STATES
Diegman, Michele, Scotch Plains, NJ, UNITED STATES
Forsyth, Nanette, Bayville, NJ, UNITED STATES
Winterbottom, John, Jackson, NJ, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|---------------|
| PATENT INFORMATION: | US 2003143258 | A1 | 20030731 |
| APPLICATION INFO.: | US 2002-271140 | A1 | 20021015 (10) |

| | NUMBER | DATE |
|-----------------------|-----------------|---------------|
| PRIORITY INFORMATION: | US 2002-392462P | 20020627 (60) |
| | US 2001-329156P | 20011012 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Choate, Hall & Stewart, Exchange Place, 53 State
Street, Boston, MA, 02109
NUMBER OF CLAIMS: 105
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 6 Drawing Page(s)
LINE COUNT: 2654
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 3 OF 7 USPATFULL on STN
TI Inhibitor of stem cell proliferation and uses thereof
AB Disclosed and claimed are methods for the isolation and use of stem cell
inhibiting factors for regulating the abnormal stem cell cycle and for
accelerating the post-chemotherapy peripheral blood cell recovery. Also
disclosed and claimed are the inhibitors of stem cell proliferation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:202058 USPATFULL
TITLE: Inhibitor of stem cell proliferation and uses thereof
INVENTOR(S): Kozlov, Vladimir, Novosibirisk, RUSSIAN FEDERATION
Tsyrolova, Irena, Gaithersburg, MD, United States
PATENT ASSIGNEE(S): Pro-Neuron, Inc., Gaithersburg, MD, United States (U.S.
corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 6432917 | B1 | 20020813 |
| APPLICATION INFO.: | US 1995-477669 | | 19950607 (8) |
| RELATED APPLN. INFO.: | Division of Ser. No. US 1994-316424, filed on 30 Sep 1994, now patented, Pat. No. US 6022848 Continuation-in-part of Ser. No. WO 1994-US3349, filed on 29 Mar 1994 Continuation-in-part of Ser. No. US 1993-40942, filed on 31 Mar 1993, now abandoned | | |

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Carlson, Karen Cochrane
LEGAL REPRESENTATIVE: Nixon & Vanderhye P.C.
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 27 Drawing Figure(s); 25 Drawing Page(s)
LINE COUNT: 1820

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 4 OF 7 USPATFULL on STN
TI Inhibitor of stem cell proliferation and uses thereof
AB Disclosed and claimed are methods for the isolation and use of stem cell
inhibiting factors for regulating the abnormal stem cell cycle and for
accelerating the post-chemotherapy peripheral blood cell recovery. Also
disclosed and claimed are the inhibitors of stem cell proliferation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:185670 USPATFULL
TITLE: Inhibitor of stem cell proliferation and uses thereof
INVENTOR(S): Kozlov, Vladimir, Novosibirisk, RUSSIAN FEDERATION
Tsyrolova, Irena, Gaithersburg, MD, UNITED STATES
PATENT ASSIGNEE(S): Pro-Neuron, Inc. (non-U.S. corporation)

| | NUMBER | KIND | DATE |
|-----------------------|---|------|--------------|
| PATENT INFORMATION: | US 2002098583 | A1 | 20020725 |
| APPLICATION INFO.: | US 2001-839164 | A1 | 20010423 (9) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1995-477668, filed on 7 Jun | | |

1995, PENDING Division of Ser. No. US 1994-316424,
filed on 30 Sep 1994, PATENTED Continuation-in-part of
Ser. No. WO 1994-US3349, filed on 29 Mar 1994, UNKNOWN
Continuation-in-part of Ser. No. US 1993-40942, filed
on 31 Mar 1993, ABANDONED

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Nixon & Vanderhye P.C., 8th Floor, 1100 N. Glebe Rd.,
Arlington, VA, 22201
NUMBER OF CLAIMS: 26
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 25 Drawing Page(s)
LINE COUNT: 1764
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 5 OF 7 USPATFULL on STN

TI Stressscopins and their uses

AB The invention provides novel nucleic acids and polypeptides, referred to
herein as stresscopin 1 and stresscopin 2, which preferentially activate
the CRH-R2 receptor over the R1 receptor. Stressscopins, analogs and
mimetics, and related CRH-R2 agonists suppress food intake and
heat-induced edema; but do not induce substantial release of ACTH.
Stresscopin also finds use in the recovery phase of stress responses, as
an anti-inflammatory agent, as a hypotensive agent, as a
cardioprotective agent, and in the treatment of psychiatric and
anxiolytic disorders. Stresscopin nucleic acid compositions find use in
identifying homologous or related proteins and the DNA sequences
encoding such proteins; in producing compositions that modulate the
expression or function of the protein; and in studying associated
physiological pathways.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:157799 USPATFULL
TITLE: Stressscopins and their uses
INVENTOR(S): Hsu, Sheau Yu, Menlo Park, CA, UNITED STATES
Hsueh, Aaron J.W., Stanford, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 2002082409 | A1 | 20020627 |
| APPLICATION INFO.: | US 2001-682706 | A1 | 20011009 (9) |

| | NUMBER | DATE |
|-----------------------|-----------------|---------------|
| PRIORITY INFORMATION: | US 2000-244128P | 20001026 (60) |
| | US 2001-276615P | 20010315 (60) |

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD,
SUITE 200, MENLO PARK, CA, 94025

NUMBER OF CLAIMS: 22
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 1988

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 6 OF 7 USPATFULL on STN

TI Maize pathogenesis-related polynucleotide and methods of use

AB The invention provides isolated PR1-C10 nucleic acids and their encoded
polypeptides. The present invention provides methods and compositions
relating to altering PR1-C10 concentration and/or composition of plants.
The invention further provides recombinant expression cassettes, host
cells, and transgenic plants.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2001:224615 USPATFULL
TITLE: Maize pathogenesis-related polynucleotide and methods
of use
INVENTOR(S): Crane, Edmund H., III, Des Moines, IA, United States
Crane, Virginia C., Des Moines, IA, United States

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 2001049834 | A1 | 20011206 |
| APPLICATION INFO.: | US 2001-832320 | A1 | 20010410 (9) |

| | NUMBER | DATE |
|-----------------------|--|---------------|
| PRIORITY INFORMATION: | US 2000-195801P | 20000410 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | ALSTON & BIRD LLP, PIONEER HI-BRED INTERNATIONAL, INC., BANK OF AMERICA PLAZA, 101 SOUTH TYRON STREET, SUITE 4000, CHARLOTTE, NC, 28280-4000 | |
| NUMBER OF CLAIMS: | 13 | |
| EXEMPLARY CLAIM: | 1 | |
| LINE COUNT: | 3469 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L4 ANSWER 7 OF 7 USPATFULL on STN
TI Inhibitor of stem cell proliferation and uses thereof
AB Disclosed and claimed are methods for the isolation and use of stem cell
inhibiting factors for regulating the abnormal stem cell cycle and for
accelerating the post-chemotherapy peripheral blood cell recovery. Also
disclosed and claimed are the inhibitors of stem cell proliferation.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2000:15624 USPATFULL
TITLE: Inhibitor of stem cell proliferation and uses thereof
INVENTOR(S): Kozlov, Vladimir, Novosibirsk, Russian Federation
Tsyrlowa, Irena, Gaithersburg, MD, United States
PATENT ASSIGNEE(S): Pro-Neuron, Inc., Rockville, MD, United States (U.S.
corporation)

| | NUMBER | KIND | DATE |
|-----------------------|--|------|--------------|
| PATENT INFORMATION: | US 6022848 | | 20000208 |
| APPLICATION INFO.: | US 1994-316424 | | 19940930 (8) |
| RELATED APPLN. INFO.: | Continuation-in-part of Ser. No. WO 1994-US3349, filed on 29 Mar 1994 which is a continuation-in-part of Ser. No. US 1993-40942, filed on 31 Mar 1993, now abandoned | | |
| DOCUMENT TYPE: | Utility | | |
| FILE SEGMENT: | Granted | | |
| PRIMARY EXAMINER: | Carlson, Karen Cochrane | | |
| LEGAL REPRESENTATIVE: | Nixon & Vanderhye, P.C. | | |
| NUMBER OF CLAIMS: | 17 | | |
| EXEMPLARY CLAIM: | 1 | | |
| NUMBER OF DRAWINGS: | 27 Drawing Figure(s); 26 Drawing Page(s) | | |
| LINE COUNT: | 1873 | | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> s 12 and (cholesterol inhibition)
L5 0 L2 AND (CHOLESTEROL INHIBITION)
=> s 12 and cholesterol

L6 1 L2 AND CHOLESTEROL

=> d l6 ti abs ibib tot

L6 ANSWER 1 OF 1 USPATFULL on STN

TI Stresscopins and their uses

AB The invention provides novel nucleic acids and polypeptides, referred to herein as stresscopin 1 and stresscopin 2, which preferentially activate the CRH-R2 receptor over the R1 receptor. Stresscopins, analogs and mimetics, and related CRH-R2 agonists suppress food intake and heat-induced edema; but do not induce substantial release of ACTH. Stresscopin also finds use in the recovery phase of stress responses, as an anti-inflammatory agent, as a hypotensive agent, as a cardioprotective agent, and in the treatment of psychiatric and anxiolytic disorders. Stresscopin nucleic acid compositions find use in identifying homologous or related proteins and the DNA sequences encoding such proteins; in producing compositions that modulate the expression or function of the protein; and in studying associated physiological pathways.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:157799 USPATFULL

TITLE: Stresscopins and their uses

INVENTOR(S): Hsu, Sheau Yu, Menlo Park, CA, UNITED STATES
Hsueh, Aaron J.W., Stanford, CA, UNITED STATES

| | NUMBER | KIND | DATE |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 2002082409 | A1 | 20020627 |
| APPLICATION INFO.: | US 2001-682706 | A1 | 20011009 (9) |

| | NUMBER | DATE |
|-----------------------|---|---------------|
| PRIORITY INFORMATION: | US 2000-244128P | 20001026 (60) |
| | US 2001-276615P | 20010315 (60) |
| DOCUMENT TYPE: | Utility | |
| FILE SEGMENT: | APPLICATION | |
| LEGAL REPRESENTATIVE: | BOZICEVIC, FIELD & FRANCIS LLP, 200 MIDDLEFIELD RD, SUITE 200, MENLO PARK, CA, 94025 | |
| NUMBER OF CLAIMS: | 22 | |
| EXEMPLARY CLAIM: | 1 | |
| NUMBER OF DRAWINGS: | 8 Drawing Page(s) | |
| LINE COUNT: | 1988 | |

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> e krebs, k/au

EKREBS, IS NOT A RECOGNIZED COMMAND

The previous command name entered was not recognized by the system.
For a list of commands available to you in the current file, enter
"HELP COMMANDS" at an arrow prompt (=>).

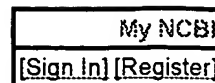
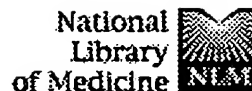
=> e krebs, k/au

| | | |
|-----|-------|--------------------------|
| E1 | 2 | KREBS YUILL BARBARA A/AU |
| E2 | 2 | KREBS YVES/AU |
| E3 | 0 --> | KREBS, K/AU |
| E4 | 2 | KREBSBACH D/AU |
| E5 | 1 | KREBSBACH F/AU |
| E6 | 1 | KREBSBACH F E/AU |
| E7 | 1 | KREBSBACH FREDERICK E/AU |
| E8 | 3 | KREBSBACH FRIEDHELM/AU |
| E9 | 2 | KREBSBACH G R/AU |
| E10 | 1 | KREBSBACH GERALD R/AU |

| | | |
|-----|---|----------------------------|
| E11 | 2 | KREBSBACH GERALD ROBERT/AU |
| E12 | 1 | KREBSBACH H/AU |

=> e lan, q/au

| | | |
|-----|----|--------------------|
| E1 | 2 | LAN ZU XIU/AU |
| E2 | 1 | LAN ZUZAI/AU |
| E3 | 0 | --> LAN, Q/AU |
| E4 | 11 | LANA A/AU |
| E5 | 21 | LANA A F/AU |
| E6 | 11 | LANA A M/AU |
| E7 | 19 | LANA A M A/AU |
| E8 | 4 | LANA A M Q/AU |
| E9 | 19 | LANA A O/AU |
| E10 | 2 | LANA A T/AU |
| E11 | 1 | LANA ADOLFO P B/AU |
| E12 | 1 | LANA ALLAN FEMI/AU |

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Note: Performing your original search, *Aedes aegypti sterol carrier protein-2* or *AeScp-2*, in PubMed will retrieve 6 citations.

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Identification of mosquito sterol carrier protein-2 inhibitors.

Kim MS, Wessely V, Lan Q.

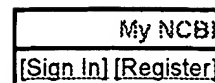
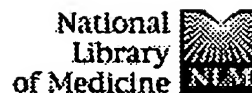
Department of Entomology, University of Wisconsin-Madison, Madison, Wisconsin, USA.

A mosquito sterol carrier protein-2, AeSCP-2, has been shown to aid in the uptake of cholesterol in mosquito cells. The discovery of chemical inhibitors of AeSCP-2 is reported here. AeSCP-2 inhibitors (SCPIs) belong to several chemotypes of hydrophobic compounds. Those inhibitors competed with cholesterol for AeSCP-2, binding with relatively high binding affinities. In cultured insect cells, SCPIs reduced cholesterol uptake by as much as 30% at 1-5 microM concentrations. SCPIs were potent larvicides to the yellow fever mosquito, *Aedes aegypti*, and to the tobacco hornworm, *Manduca sexta*, with 50% lethal doses (LD50s) of 5-21 microM and 0.013-15 ng/mg diet, respectively. The results indicate that sterol carrier protein-2 has functional similarity in two different insect species.

MeSH Terms:

- Animals
- Carrier Proteins/antagonists & inhibitors*
- Carrier Proteins/metabolism*
- Cell Line
- Cholesterol/metabolism
- Culicidae/drug effects
- Culicidae/metabolism*
- Inhibitory Concentration 50
- Insect Proteins/antagonists & inhibitors*
- Insect Proteins/metabolism*
- Larva/drug effects
- Mice
- Molecular Structure
- Research Support, Non-U.S. Gov't
- Research Support, U.S. Gov't, Non-P.H.S.
- Sterols/metabolism*

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Cholesterol interaction with recombinant human sterol carrier protein-2.

Colles SM, Woodford JK, Moncecchi D, Myers-Payne SC, McLean LR, Billheimer JT, Schroeder F.

Department of Pharmacology and Cell Biophysics, University of Cincinnati Medical Center, Ohio 45267-0004, USA.

The interaction of human recombinant sterol carrier protein-2 (SCP-2) with sterols was examined. Two independent ligand binding methods, Lipidex 1000 binding of [3H]cholesterol and a fluorescent dehydroergosterol binding assay, were used to determine the affinity of SCP-2 for sterols. Binding analysis indicated SCP-2 bound [3H]cholesterol and dehydroergosterol with a K_d of 0.3 and 1.7 μM , respectively, and suggested the presence of a single binding site. Phase fluorometry and circular dichroism were used to characterize the SCP-2 sterol binding site. Alterations in dehydroergosterol lifetime, SCP-2 tryptophan lifetime, and SCP-2 tryptophan quenching by acrylamide upon cholesterol binding demonstrated a shielding of the SCP-2 tryptophan from the aqueous solvent by bound sterol. Differential polarized phase fluorometry revealed decreased SCP-2 tryptophan rotational correlation time upon cholesterol binding. Circular dichroism of SCP-2 indicated that cholesterol elicited a small decrease in SCP-2 α helical content. The data suggest that SCP-2 binds sterols with affinity consistent with a lipid transfer protein that may act either as an aqueous carrier or at a membrane surface to enhance sterol desorption.

PMID: 8577222 [PubMed - indexed for MEDLINE]

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